DEPARTMENT OF TOXIC SUBSTANCES CONTROL

Our mission is to provide the highest level of safety, and to protect public health and the environment from toxic harm.

Fact Sheet, January 2009

Chemical Toilet Products Advisory for Retailers, Suppliers and Manufacturers

Prohibited Chemical Toilet Product Ingredients and Formaldehyde

Chemical Toilet Products sold and used in California to control holding tank odors and waste decomposition in recreational vehicles (RV), boats, campgrounds and RV parks, etc. are banned if they contain a non-biodegradable toxic chemical. While there are many banned non-biodegradable toxic chemicals, **formaldehyde** (commonly used to reduce odor in chemical toilet waste) has come to the attention of the Department of Toxic Substances Control (DTSC) and based on data that was reviewed, meets the criteria as a non-biodegradable toxic chemical substance. **Any chemical toilet product containing formaldehyde in any concentration should not be sold or used in California.**

Background

Chemical toilet products may contain chemicals that are known to cause septic tank failures by killing the bacteria essential to the treatment process in the septic tank. In 1979, California passed the Prohibited Chemical Toilet Additives law, which banned the manufacture, sale and use of non-biodegradable toxic chemicals in products used in chemical toilets or waste facilities in California. This law was expanded in 1988 to include a similar ban on the sale and use of halocarbons chemicals in products used to clean or unclog a sewage disposal system.

The criteria for a non-biodegradable toxic chemical substance is identified in regulations (see next page “for more information”). Nineteen inorganic chemicals are listed as banned non-biodegradable toxic substances. If a chemical substance is not listed, two criteria must be met in order to determine if it is banned. A chemical substance must meet the criteria for (1) toxic and (2) non-biodegradable as described in regulations to be a non-biodegradable toxic chemical substance and banned in any concentration in products used for treating waste in a chemical toilet. Formaldehyde meets these criteria based on data that DTSC has reviewed.

Why formaldehyde should not be used in chemical toilet additives

Formaldehyde controls odor by killing bacteria. Formaldehyde also kills bacteria necessary to breakdown the wastes and aid decomposition in septic tanks. When holding tank wastes are disposed into a "dump station" at a campground or RV park (i.e., usually to a septic system), the formaldehyde will kill the bacteria in the septic tank, eventually leading to a clog in the system. When a septic system fails, sewage wastes does not breakdown and can cause an increased risk to people from contact with raw sewage.

Definitions

"Chemical toilet" means any portable or permanently installed sanitation apparatus or system which utilizes a tank for toilet waste retention and into which a chemical toilet additive is added.

"Chemical toilet additive" means any chemical substance, biological agent, or other material or formulation thereof, which is employed for the primary purpose of controlling waste decomposition and odors in a chemical toilet holding tank or any tank in which chemical toilet wastes are held, collected or transported. The term "chemical toilet additive" includes, but is not limited to, a chemical substance, biological agent or other material which is a deodorant, bactericide, bacteriostat, microbiocide, chemical reactant, surfactant or enzymatic agent.

"Chemical toilet waste" means the waste in or from a chemical toilet.

"Halocarbon chemicals" means chemical compounds which contain carbon, and one or more halogens, and which may include hydrogen, including, but not limited to, trichloroethane, tetrachloroethylene, methylene chloride, halogenated benzenes, and carbon tetrachloride.

"Non-biodegradable" generally means that a chemical does not degrade (breakdown or reduced to a certain strength) when tested to measure how much oxygen bacteria would use to breakdown the chemical over a short period of time.

"Sewage disposal system" means a septic tank, cesspool, sewage seepage pit, leachline, or other structure into which sewage is drained for purposes of disposal and which is not connected to a municipal treatment works.

For More Information

Consult Chapter 6.5, Article 10, Prohibited Chemicals, Health and Safety Code and Chapter 41, Title 22, California Code of Regulations. For other useful information see http://www.epa.gov/owm/septic/pubs/rv-wastewater.pdf or http://cfpub.epa.gov/owm/septic/index.cfm.

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